

**REMARKS**

In the Office Action mailed March 1, 2007, the Office Action objected to claims 5 and 13 under 37 C.F.R. 1.75. The Office Action also rejected claims 1-16 under 35 U.S.C. § 112. The Office Action further rejected claims 1, 2, 9 and 10 under 35 U.S.C. § 103. Claims 1, 4-5, 9 and 12-13 have been amended.

Applicants respectfully respond to this Office Action.

**I. Specification**

Applicants provide herewith amendments to the specification. The amendments to the specification are made by presenting marked up replacement paragraphs which identify changes made relative to the immediate prior version.

The changes made are primarily typographical or grammatical in nature, or involve minor clarifications of awkward wordings. Applicants believe these changes add no new matter to the application and are fully supported by the original disclosure.

**II. Claims 5 and 13 Objected Under 37 CFR 1.75**

The Office Action objected to claims 5 and 13 under 37 CFR 1.75 as including informalities. Claims 5 and 13 have been amended from “a set of hypotheses” to “the set of hypotheses” as suggested by the Office Action. Accordingly, Applicants respectfully request that the objection to claims 5 and 13 be withdrawn.

**III. Claims 1-16 Rejected Under 35 U.S.C. § 112**

The Office Action rejected claims 1-16 under 35 U.S.C. §112 as being indefinite. Claims 1 and 9 have been amended to recite “the set of hypotheses includes a plurality of hypotheses . . . and . . . each of the hypotheses of the reduced number of hypotheses comprising the plurality of hypotheses within the set of hypotheses.” Applicants submit that claims 1 and 9, as amended, particularly point out that it is a “number of hypotheses comprising the plurality of hypotheses” that is reduced. Accordingly, Applicants respectfully request that the rejection of claims 1 and 9 be withdrawn.

Claims 4 and 12 have been amended as suggested by the Office Action. As such, Applicants request that the rejection of claims 4 and 12 be withdrawn.

Claims 2, 3 and 5-8 depend either directly or indirectly from claim 1. As such, Applicants request that the rejection of claims 2, 3 and 5-8 be withdrawn.

Claims 10, 11 and 13-16 depend either directly or indirectly from claim 9. As such, Applicants request that the rejection of claims 10, 11 and 13-16 be withdrawn.

**IV. Claims 1, 2, 9 and 10 Rejected Under 35 U.S.C. § 103**

The Office Action rejected claims 1, 2, 9 and 10 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,914,950 to Tiedemann, Jr. et al. (hereinafter, “Tiedemann”) in view of U.S. Patent No. 6,999,425 to Cheng et al. (hereinafter, “Cheng”). This rejection is respectfully traversed.

The factual inquiries that are relevant in the determination of obviousness are determining the scope and contents of the prior art, ascertaining the differences between the prior art and the claims in issue, resolving the level of ordinary skill in the art, and evaluating evidence of secondary consideration. KSR Int’l Co. v. Teleflex Inc., 550 U.S. \_\_\_, 2007 U.S. LEXIS 4745, at \*\*4-5 (2007) (citing Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966)). To establish a *prima facie* case of obviousness, the prior art references “must teach or suggest all the claim limitations.” M.P.E.P. § 2142. Moreover, the analysis in support of an obviousness rejection “should be made explicit.” KSR, 2007 U.S. LEXIS 4745, at \*\*37. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” Id. (citing In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Applicants respectfully submit that the claims at issue are patentably distinct from the cited references. The cited references do not teach or suggest all of the limitations in these claims.

Claim 1 has been amended to recite “using historical transmission information to reduce the number of hypotheses comprising the plurality of hypotheses within the set of hypotheses.” Support for this amendment may be found in Applicants’ specification, for example, page 37, paragraph [00120]. Tiedemann does not teach or suggest this claim element.

In fact, the Office Action admits that “Tiedemann, Jr. et al. fails to teach the method comprising of using historical transmission information to reduce the set of hypothesis.” See Office Action page 4. The addition of Cheng does not overcome the deficiencies of Tiedemann.

Instead, Cheng states:

The algorithm gives a reverse link load value that is a moving average of the reverse link load from a time frame that goes from the distant past up to the present. Each new calculation by the algorithm updates the most recently calculated reverse link load value by adding an increment load value to the previously obtained value and is dependent upon the number of frames in a window. The algorithm here disclosed does not ignore the previously calculated load value when computing the new load value. Actually, each new calculation by the algorithm builds on the previously calculated load value and modifies the previously obtained load value to include the most recently obtained load value.

Cheng, col. 5, lines 38-49.

The Office Action points to the above cited passage of Cheng in support of the assertion that Cheng teaches “using historical transmission information to reduce the number of hypotheses comprising the plurality of hypotheses within the set of hypotheses.” See Office Action, page 5. Applicants respectfully disagree with this assertion.

As provided above, Cheng states “[t]he algorithm disclosed does not ignore the previously calculated load value when computing the new load value.” Cheng, col. 5, lines 44-46. It appears that the Office Action is asserting that this statement of Cheng teaches “using historical transmission information.” However, there is no teaching or suggestion by Cheng of using “the previously calculated load value” to “reduce the number of hypotheses comprising the plurality of hypotheses within the set of hypotheses.” Rather, Cheng states that the “previously calculated load value” is used to “comput[e] the new load value.” Id. Using the previous load value to compute a new load value does not teach or suggest “using historical transmission information to reduce the number of hypotheses comprising the plurality of hypotheses within the set of hypotheses.” In fact, Cheng teaches quite the opposite.

For example, Cheng states “[e]ach new calculation by the algorithm updates the most recently calculated reverse link load value by adding an increment load value to the previously obtained value.” Cheng, col. 5, lines 40-43. In other words, Cheng updates and adds an increment to the previously obtained value. Updating and adding an increment to a previously

obtained value is contrary to the teaching of “reduc[ing] the number of hypotheses comprising the plurality of hypotheses within the set of hypotheses.”

In addition, Cheng states “each new calculation by the algorithm builds on the previously calculated load value and modifies the previously obtained load value to include the most recently obtained load value.” Cheng, col. 5, lines 46-49. Building on and modifying the previously calculated load value is a contrary teaching to “reduc[ing] the number of hypotheses comprising the plurality of hypotheses within the set of hypotheses.” There is no suggestion or teaching in the passage of Cheng provided by the Office Action of “using historical transmission information to reduce the number of hypotheses comprising the plurality of hypotheses within the set of hypotheses.” As shown, Cheng uses “the previously calculated load value” to update, add, build and modify “the previously load value.”

In view of the foregoing, Applicants respectfully submit that claim 1 is patentably distinct from the cited references. Accordingly, Applicants respectfully request that the rejection of claim 1 be withdrawn.

The Office Action rejected Claim 2 under 35 U.S.C. § 103 based on Tiedemann, in view of Cheng. This rejection is respectfully traversed. It is well settled that if an independent claim is patentable over the cited art, then all claims depending from the independent claim are similarly patentable. M.P.E.P. § 2143.03 (“If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious”). In this case claim 2 depends directly from claim 1. As noted above, claim 1 is patentable and nonobvious over the cited references. Accordingly, as the independent claim is patentable over this reference, dependent claim 2 (which depends from independent claim 1) is similarly allowable. Favorable consideration and withdrawal of this rejection is respectfully requested.

Claim 9 has been amended to include a new limitation in a similar manner as claim 1. As such, Applicants respectfully submit that claim 9 is patentably distinct from Tiedemann and Cheng, alone or in combination, for at least the same reasons as those presented above in connection with the new limitation of claim 1. Accordingly, Applicants respectfully request that the rejection of claim 9 be withdrawn.

Claim 10 depends directly from claim 9. Accordingly, Applicants respectfully request that the rejection of claim 10 be withdrawn for the same reasons as those presented in connection

with claim 10 because Tiedemann and Cheng, alone or in combination, do not teach or suggest all of the elements of claim 9.

**V. Allowable Subject Matter**

The Office Action indicated that claims 3-8 and 11-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112 set forth in the Office action, and to include all of the limitations of a respective base claim and any intervening claims. As provided above, claims 3-8 and 11-16 depend from claims 1 and 9, respectively, which have been amended to overcome the rejection under 35 U.S.C. § 112.

Claims 3-8 and 11-16 have not been rewritten at this time to include all of the limitations of their respective base claim and any intervening claims. As provided above, Applicants respectfully assert that the respective base claims of claims 3-8 and 11-16 are patentable over the cited references.

Claims 3-8 depend either directly or indirectly from claim 1. As such, Applicants submit that claims 3-8 are patentable as written over the cited references for at least the same reasons as those provided above in connection with claim 1.

Claims 11-16 depend either directly or indirectly from claim 9. As such, Applicants submit that claims 11-16 are patentable as written over the cited references for at least the same reasons as those provided above in connection with claim 9.

**REQUEST FOR ALLOWANCE**

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 05/29/2007

By: /Eric Ho/  
Eric Ho, Reg. No. 39,711  
(858) 658-2752

QUALCOMM Incorporated  
5775 Morehouse Drive  
San Diego, California 92121  
Telephone: (858) 651-4125  
Facsimile: (858) 658-2502